

## REMARKS/ARGUMENTS

### Claim Rejections -35 USC §103

Claims 1, 3-7, 9, 10 & 13-24 were rejected under 35 U.S.C. 103(a) as being unpatentable over Motley et al (US 3,931 ,584), hereinafter Motley, in view of the Applicant admitted prior art, hereinafter AAPA.

Applicants respectfully traverse the rejection. Independent claims 1, 7, 13 recite "directly" or "control directly", which is supported by the examples in paragraphs [0020] – [0026]. Whereas, Motley teaches indirect control, additional circuitry containing a counting procedure over a period of time to determine if the MSB of the ADC should influence the fine and coarse AGC's. The counting procedure is shown in Fig. 3 elements 59 and 61 and described in col. 3 lines 8 – 21 and in col. 8 lines 5 – 25. Further, Motley teaches indirect control, additional conditions, element 60 (col. 7 line 61), where the MSB is XOR'd with the MSB to produce an input to the counting circuit.

Regarding Claim 13, Motley does not teach or suggest the "single sample" recited in Claim 13. In contrast, due to the counting procedure, Motley looks over many samples to pass to a comparator. Further "radio signal" is not found in Motley, since Motley addresses a dedicated wired land-line telephone channel signal (col. 4 lines 3 – 15) and not a "radio signal" as recited in Claim 13, as alleged by the Examiner. Claim 7 has been amended to recite "radio signal", not found in Motley. Also, this amendment is for clarification because the word "signal" was used to refer to two different signals. No new matter is introduced.

Applicants also respectfully submit that a proper 103(a) type rejection has not been demonstrated for two reasons. The Examiner stated, "Motley fails to teach digital channel filtering circuitry for filtering said digital representation and digital

processing circuitry for processing the output of said digital channel filtering circuitry".

First, the Examiner did not demonstrate it is obvious to create the combination. To the contrary, it is more natural to do it the prior art (fig. 1) way which is why it is the originally adopted approach. Since it is the performance of the entire system which matters, it is natural to get the final filtered and DSP results to determine if the entire system considers the processing of the signal to be optimal, because later stages in the signal chain may adjust or correct for previous issues in the earlier stages of the signal chain. Then if the later stages cannot adjust for any perceived defects, then the later stages should notify the earlier stages and conduct adjustments such as on the AGC.

Further, since Motley addresses a dedicated wired land-line telephone channel signal (col. 4 lines 3 – 15) and not a "radio signal" as recited in Claim 13, Motley does not have the interference issue of signals traveling through airwaves. The present application deals with two modes of operation, sensitivity and interference and invention for such a situation. Whereas, Motley deals only with sensitivity (col. 4 lines 12 – 15). So it is not obvious an engineer of skill in the art, looking to solve problems for radio signal transmission, is going to even look to Motley for inspiration.

Second, the Examiner did not demonstrate any suggestions from the prior art themselves to produce the invention. In his rejection, the Examiner used the AAPA and the text describing the AAPA which contains no suggestion, but of course the text about the invention itself does suggest the combination invention, so the AAPA itself does not suffice. Instead, it is necessary to find some suggestion from the external, Motley reference to provide a proper 103(a) rejection.

**It is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. In re Gorman, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed.Cir.1991). See also Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed.Cir.1985).**

Therefore, independent Claims 1, 7 and 13 are believed allowable over Motley and the AAPA for the foregoing many reasons. The other claims being dependent on these claims should be allowable for at least the same reasons. In addition, in the rejections against Claims 13 – 19, 21, 22 – 24, the Examiner relied solely on the AAPA as there is no teaching or suggesting in Motley for the claimed element. Again, the Examiner had not demonstrated a proper case for a 103(a) rejection..

#### New Claims

New Claim 25 is the previously presented Claim 3 with the addition of "free of counting a number of the most significant of said bit". Support for this is found in fig. 2, and paragraphs [0020] – [0026]. No new matter is introduced.

Respectful request is made for reconsideration of the application, as amended, and for an issuance of a Notice of Allowance.

Respectfully submitted,

/Dolly Y. Wu/  
Dolly Y. Wu  
Reg. No. 59,192  
Texas Instruments Incorporated  
PO Box 655474, M/S 3999  
Dallas, Texas 75265  
972.917.4144

